1927

VEGETABLE GROWER'S NEWS LETTERS

January
- The Annual Meetings are Over
- The Seed Catalogues
- Annual Conference of County Agents
- "All Together" for the Corn Crop
- Miscellaneous Notes

February
- The Agricultural Outlook
- Vegetables of American Origin
- "White Pickle"
- The Florists Seek Cooperation
- Beans
- Hot Beds and Cold Frames

March
- United States Grades for Asparagus (1925)
- U. S. No. 1
- Unclassified
- Size
- Definition of Term
- Weekly Truck Crop News
- Sweet Potato Campaign
- The Marglobe Tomato
- U. A. Grades for Canning Tomatoes (1926)
- Definition of Terms
- Look Out for the Bean Anthracnose

April
- Condition of Early Truck Crops in the South
- The Tomato Plant Bed
- Cut Out the Cut Worm
- The Temperamental Hotbed
- Nitrogen for Early Crops
- The Maryland Standard Twelve

May
- Asparagus Tour
- Spinach
- The Annual Report
- A Labor Saver for Truckers
- Turning Back the Attack on Cucumbers and Cantaloupes
- Certified Potatoes

June
- Worcester Co. Potato Tour
- Comments on Crops
- Radio and the Farmer
- Asparagus Propagation

July
- The Annual Report
- Do you Know Beans?
- Limas Shy Bearers
- The Turnip Patch
- Plant Protectors
- Tomato Mosaic
- Chinese Cabbage

August - September

The Secretary Travels
Second Crop Potato Seed
Recent Publications
Tomato Growers Meet

October

Bean Culture
The Late Blight of Potatoes
The Elusive Cauliflower
How is your Spinach?
Potato Tuber Unit Work
Tomato Mosaic Disease
Edible Mushrooms
Cabbage Storage

November - December

Program for the Annual Meetings
A New Food Crop
How about More Lettuce?
"Mass Production" of Vegetables

VEGETABLE GROWERS' NEWS LETTER.

Issued by
W. R. Ballard, Secretary-Treasurer,
The Maryland Vegetable Growers' Association.

Vol. No. 4. No. 1. College Park, Maryland. January, 1927.

The Annual Meetings Are Over: The Secretary regrets very much that sickness prevented his attendance at the Annual Meetings of the Association. Reports indicate that the sessions were well attended, and that the discussions aroused lively interest despite the fact that several speakers were unable to attend on account of sickness or otherwise.

In the absence of Mr. George McKeown, the subject of asparagus culture was handled by Mr. A. D. Radebaugh. Interest in this crop has been developing in recent years and a gradual increase in acreage can be noted. The introduction of the Washington strains, of which Mary Washington seems to be preferred, have undoubtedly contributed materially to this interest. Certain Maryland growers having suitable soils which warm quickly in spring have been securing fancy prices for their product. Careful grading and packing have had much to do with this happy result.

The results of experimental work at the Maryland Experiment Station with fertilizers for this crop were presented by Mr. Thomas H. White.

Mr. L. M. Goodwin reported on the performance of the Marglobe tomato in the State last year. The fact that this variety is resistant to the Fusarium wilt makes it of special value for wilt infested areas.

Dr. F. J. Pritchard of the U. S. Department of Agriculture gave some very practical suggestions for controlling some of the blights which attack the tomato. Fall plowing in which all plant refuse is thoroughly buried has proved to be very effective in controlling the Septoria leaf spot.

In his discussion of Plant Bed Structures, and the Production of Early Plants, Mr. W. B. Nissley of the State College at State College, Pennsylvania, outlined methods which Maryland growers must sooner or later adopt to keep their place in competition with other sections.

Professor E. N. Cory presented the latest information respecting the distribution of new insects affecting the Maryland truck grower with suggestions for combating them.

A subject of more than passing interest was presented by Mr. E. W. Stilwell of the U. S. Bureau of Agricultural Economics. Regional production and competition in the marketing of vegetables is calculated to give some of our growers cause for concern for months to come. Not only is the South expanding tremendously their output of fresh vegetables, but other regions having about the same seasonal conditions for production are competing for a share in the markets. There is every indication that this competition

is to become keener in the future. The answer to this threat is the adoption of better production methods and a realization that proper grading and packing methods pay.

The full text of these addresses will be published in the Annual Report, but the members should remember that this is distributed to those whose dues are not in arrears. Mail the Secretary that check for $1.00 without delay!

The Seed Catalogues: This is the time of year for the farmer to analyze his business to consider the mistakes and failures of the past year and to determine the plans for the season of production so near at hand. One very pleasant element in this procedure is the perusal of the alluring array of seed catalogues. Too little do we appreciate the services which these institutions render to the vegetable growing industry. Some idea of how intricate and involved are the methods required to keep seed stocks up to standard may be secured by rereading the address by Dr. L. C. Corbett on "The Vegetable Seed Situation," in the Annual Report for last year.

In ordering seed the temptation is strong to base the selection on price — to choose the cheapest. It does not necessarily follow that the most expensive seed is greatly superior to that more moderately priced. Probably the best plan is to stick pretty close to the true and tried sorts for the main plantings, but along with this to try on a small scale some of the more promising novelties. Without such tests one may miss the profit accruing to the ones who first discover new varieties of merit.

The cost of seed is a comparatively small item in total production costs, and yet this single item may mean profit or loss on the crop.

Annual Conference of County Agents: The annual conference of Extension Service workers has just come to a close. A number of subjects of interest to vegetable growers were given careful consideration, and definite plans were formulated for keeping the growers informed of the latest developments in the field.

In discussing the Irish potato crop one of the most significant factors influencing production was cited by Dr. F. B. Bomberger in discussing marketing methods. He said that U. S. Potato Inspectors assert that fully one-third of the Cobbler crop failed to meet U. S. Standard grades due entirely to blemishes caused by scab. With this disease taking such a tremendous toll it behooves research workers, extension service specialists, and agents as well as growers, to make a determined effort to stop this leak. The use of the organic mercuric compounds seem to be of value in treating seed stock, but such treatments are of little value when the soil is infested. There is little question but that scab is worse where manure is used on the soil, and yet it is under just such conditions that the heaviest yields are produced. The

fungus develops best in a neutral or alkaline condition so that growers can counteract its effect somewhat by the slightly acid condition produced by plowing down heavy green manure crops and by using chemical fertilizers such as muriate of potash and acid phosphate.

In the session devoted to marketing problems attention was directed to Secretary Jardine's statement that the farmer should concern himself with efforts to "control the controllable factors." Upon analysis it becomes clear that the majority of the "controllable factors" have to do with production and not, as so many farmers seem to think, with distribution and marketing. To suggest only a few of the fields in which the grower has some chance of changing conditions, Dr. Bomberger lists the following: weather, soil fertility, management, seed, breeding stock, insect control, disease control, tillage, fertilization, harvesting, handling, farm storage, culling, grading, packing.

Another point worthy of consideration was stressed by President R. A. Pearson in addressing the conference. This referred to the necessity of cutting "production costs." This is the basis of all successful manufacturing enterprises and applies just as much to the business of farming. In times of stress growers who exercise good management stand to lose the least and in times of prosperity is the one who reaps the handsomest profit.

"All Together" for the Corn Crop: Investigations have disclosed the fact that the use of sweet corn seed just as it "comes from the cob" without grading, results in quite a variation in the time of maturity of the crop. This condition is of more concern in the canning crop than in that grown for the fresh market. It has been found that this variation can be greatly reduced by the simple expedient of grading the seed through the use of screens to remove the small kernels and those of abnormal shape and size. This is a method which could readily be applied by the grower and together the elimination of the uneconomic practice of "suckering" should enable growers to make some headway towards reducing "production costs."

Miscellaneous Notes: Recent tests indicate that the seeding of canning crop peas at the rate of four and one-half bushels per acre respresents the greatest return on the cost of the seed.

In the production of tomatoes for canning it appears that the average rate of application of fertilizer for this crop would not be over three-hundred to five-hundred pounds per acre. Individual growers get results by the use of one-thousand pounds to twelve-hundred pounds of a fairly high grade fertilizer. It seems quite likely that growers could increase the amount of fertilizer for this crop to advantage. Undoubtedly the tomato would respond to this treatment more noticeably than would some other crops, and the point of "diminishing returns" would be found higher up in the scale than with many other vegetables.

VEGETABLE GROWERS' NEWS LETTER

Issued by

The Maryland Vegetable Growers' Association,
W. R. Ballard, Secretary-Treasurer

Vol. 4. No. 2. College Park, Md. February - 1927

The Agricultural Outlook. The Extension Service has just issued in mimeographed form the 1927 Agricultural Outlook for Maryland. Besides a discussion of the general situation two pages are devoted to truck and canning crops. Careful reading of this report would be well worth while for every member of this Association. A copy may be secured by applying to the Extension Service, College Park, Maryland.

Vegetables of American Origin. The world is greatly indebted to the Americas for contributing some of the most important of our vegetable crops. The following list may be of interest in this connection.

American Origin

Beans	Peppers	Squash	Potato
Corn	Pumpkins	Tomato	Sweet Potato

Old World Origin

Cucumbers	Beets	Kale & Collard	Parsnip
Eggplant	Brussels Sprouts	Kohl-Rabi	Peas
Muskmelon	Cabbage	Leek	Radish
Watermelon	Carrots	Lettuce	Salsify
Okra	Cauliflower	Onion	Spinach
Asparagus	Celery	Parsley	Turnip

While the list of vegetables of American origin is much smaller than that of the Old World, their relative importance is much greater. The farm value of potatoes alone represents approximately $650,000,000 as compared with $110,000,000 the value of all vegetable crops of Old World origin put together. Even sweet potatoes were valued in 1919 at $120,000,000.

"White Pickle." The mosaic disease of cucumbers common called "white pickle" has caused such heavy losses on the Eastern Shore during the last season or two that growers have become alarmed at the situation. A mass meeting has been called for March 9th at 7:30 P. M. at the Court House in Salisbury, to consider measures of control. Cantaloupe growers will be interested in this meeting since cantaloupe vines are subject to attack

by the same disease. Lantern slides illustrating various phases of the problem will be shown. Certain common weeds, such as poke weed, are hosts for the disease. The cucumber beetles seem to be responsible largely for the spread of the disease so that their control is a very important link in the chain of defense. The U. S. Department of Agriculture has just issued a Department bulletin No. 1461, Control of Cucumber Mosaic by Eradication of Wild Host Plants.

The Florists Seek Cooperation. Directors of the Farm Bureau and representatives of the affiliated Organizations met in conference at Baltimore, February 10th to consider a proposition presented by the Florist Club. The florists of Baltimore have undertaken the entertaining of the American Chrysanthemum Society with an exhibit of chrysanthemums at the Fifth Regiment Armory early in November of this year. The affiliated Organizations were asked to cooperate in the project by staging exhibits to cover approximately 25% of the space. This would involve moving ahead the datesof the annual meetings to coincide with that of the exhibits. After considerable discussion the decision was reached not to accept the invitation of the Florists Club to cooperate in the exhibit. The fruit and corn growers felt that it would be impossible to stage adequate exhibits at this early date. In addition the labor situation makes it questionable whether growers could conveniently leave their farm operations at this time of the year. Sentiment, however, seems to be growing for bringing back the Maryland Week Show.

Beans. While the quantities of dry beans produced in Maryland is neglegible the growing of snap beans has developed into an important industry. During 1924 and 1925, 2550 and 2750 acres respectively were grown. The yield in 1924 was 178,000 hampers while in 1925, 275,000 hampers were produced. These figures, however, do not take into account those grown in the thousands of market gardens surrounding the centers of population. Giant Stringless and Burpee's Stringless are the most important varieties grown for canning purposes. Full measure is grown to some extent and the acreage devoted to this variety seems to be on the increase.

Hot Beds and Cold Frames. This is the time of year when the wide-awake grower is getting the hot beds ready to steal a march on Jack Frost. The scarcity of manure necessitates the considering of other methods of developing heat essential to success with this venture. Artificial heat has been used advantageously in some sections. Arrangements varying from crude brick fireboxes and tile pipes under the beds to elaborate steam outfits have been used. Farmer's Bulletin, No. 460, Frames as a Factor in Truck Growing, furnishes some interesting data in the use of hot beds and cold frames in the production of early crops.

VEGETABLE GROWERS' NEWSLETTER

Issued by

The Maryland Vegetable Growers' Association,
W. R. Ballard, Secretary - Treasurer

Vol. 4. No. 3. College Park, Maryland. March 1927

U. S. Grades for Asparagus (1925)

The Bureau of Agricultural Economics of the United States Department of Agriculture has established grades for asparagus. For the benefit of growers shipping this crop a copy of these grades follow.

U. S. No. 1

U. S. No. 1 shall consist of clean, fresh stalks of asparagus which are not wilted or crooked; which do not show broken or spreading tips and which are free from damage caused by disease, insects or mechanical or other means.

In order to allow for variations incident to proper grading and handling, not more than 10 per cent, by count, of any lot may be below the requirements of this grade.

UNCLASSIFIED

Unclassified shall consist of stalks which do not meet the requirements of the foregoing grade.

SIZE

In addition to the statement of grade, any lot of asparagus may be classified as small, medium or large, if eighty per cent, by count, of the stalks in any lot conform to the following requirements for such sizes:

Small	Medium	Large
3/8 to 9/16 inch.	9/16 to 3/4 inch inclusive.	Over 3/4 inch.

The foregoing table refers to the maximum diameter of the stalks measured at a point not more than 8 inches from the tip.

DEFINITION OF TERM

"Free from damage" means that any injury from causes mentioned shall not materially affect the appearance of the asparagus.

Weekly Truck Crop News

The Bureau of Agricultural Economics issues a weekly truck crop news service which includes reports of conditions in the various crop producing areas. The members of the Maryland Association might find this of timely interest. No doubt copies could be secured by writing to the U. S. Bureau of Economics (Truck Crop Section) Washington, D. C.

Sweet Potato Campaign

A very enthusiastic meeting of sweet potato growers was held recently at Salisbury to consider plans for placing this important industry on a sounder foundation. Statistics show that of the 941,314 bushels produced in Maryland in 1925, Wicomico county contributed 469,332 bushels. The approximate annual value of this crop for the State as a whole is $1,000,000. The value of the Wicomico crop in round numbers would be $500,000 annually. Storage losses every year in this county amount to 20% - 25% of the crop value or from $100,000 to $125,000 annually. These losses can be divided up nearly equally between Black Rot and storage rots. 90% of which is preventable.

Measures for the improvement of this very unsatisfactory condition must include the construction of better houses or the remodelling of old ones to conform to the best known types and distinct improvement in the management of the houses. Control of diseases in the field so that the potatoes to be stored will be free from disease when placed in storage is another factor of great importance. Recommended methods of control were sent recently to all members of the association. If additional copies are needed, write the Secretary.

The use of slip plants for producing seed stock free from disease is to be highly favored. With care in the handling of seed stock and the development of proper storage conditions, it should be possible to eliminate to a large extent the heavy annual losses on this crop.

The Marglobe Tomato

If the demand for seed is any indication, there will be a greatly increased acreage planted to the Marglobe tomato this coming season. The reports from this variety last season indicate that it has more than the usual number of good qualities. The fact that it has good canning quality in addition to its productiveness and resistance to the Fusarium wilt should make it of particular interest to those who grow for the cannery. It is also an admirable market tomato. It is not as early, however as the Earliana type and should not be substituted for the first early variaties. In this early field the Penn State strain of Earliana has considerable promise.

U. S. Grades for Canning Tomatoes (1926)

United States Department of Agriculture, Bureau of Agricultural Economics. (N. B. The following grades have not been officially adopted, but are offered as a basis for discussion).

U. S. No. 1 shall consist of tomatoes which are firm, ripe, well formed, free from molds and decay, and from damage caused by growth cracks, worm holes, catfaces, scars, sunscald, freezing injury, or mechanical or other means. (see minumum size).

U. S. No. 2 shall consist of tomatoes which do not meet the requirements of the foregoing grade but which are fairly well ripened and which are free from serious damage from any cause. (See minimum size).

CULLS are tomatoes which do not meet the requirements of either of the foregoing grades.

THE MINIMUM SIZE shall be fixed by agreement between buyer and seller. Tomatoes below this specified minimum size shall be classed as Culls.

DEFINITION OF TERMS

1. "Firm" means that the tomato is not puffy, shriveled or water soaked.

2. "Ripe" means that the tomato show at least 90% good red color.

3. "Fairly well ripened" means that the tomato shows at least two-thirds good red color.

4. "Well formed" means that the tomato shall not be extremely flat or otherwise badly misshapen.

5. "Damage" means any injury from the causes mentioned which cannot be removed in the ordinary processof trimming and peeling without a loss of more than 10% (by weight) of the tomato in excess of that which would occur if the tomato were perfect.

6. "Serious damage" means any injury from the causes mentioned which cannot be removed in the ordinary process of trimming and peeling without a loss of more than 20% (by weight) of the tomato in excess of that which would occur if the tomato were perfect.

Look Out For the Bean Anthracnose

The use of disease free seed seems tobe an essential factor in the control of bean anthracnose. Preliminary tests seem to show that seed stocks produced in the semi-arid regions

of the west are relatively freer of this disease than those from other sources. The Extension Service and the Experiment Station are cooperating in a series of tests and surveys to determine the best method of insuring the right kind of seed stock for the growers.

VEGETABLE GROWERS' NEWSLETTER

Issued by

The Maryland Vegetable Growers' Association,
W. R. Ballard, Secretary - Treasurer.

Vol. 4. No. 4. College Park, Maryland April 1927

Condition of Early Truck Crops in the South

The Bureau of Agricultural Economics of the United States Department of Agriculture reports as of April 1st on the revised estimate of commercial acreage and forecast of production of six truck crops in Early and Second Early Districts compared with the acreage and production in 1926. Indications are that the acreage of snap beans in the three states of California, Florida and Texas will be 20,970 acres as compared with 15,430 acres for 1926. The yield per acre as well as the total production will show substantial increases. There is apparently a slight reduction in estimates for eggplant production in Florida. The production of second early lettuce in southern sections is likely to be slightly in excess of the 1926 crop. A substantial increase is noted in the estimate of production for early green peas. Florida is increasing slightly her acreage of peppers. Acreage and total production of early potatoes are likely to be considerably increased over the 1926 crop but the yield per acre is estimated to be somewhat less.

The condition of certain crops as compared with previous years is indicated as follows: The average condition of asparagus for seven southern states on April 1st expressed in percentages is for 1927, 59% as compared with 91% for 1926, and 85% for the ten year period. Lettuce is 1% better than for the corresponding date in 1926 but is slightly less than the percentage for the ten year period. For peas the figures are 93% for 1927, 70% for 1926 and 82% for the ten year period. Early cabbage averaged for 10 states, is given as 76% for 1927, 75% for 1926 and 77% for the ten year period. The condition of early potatoes is indicated by the figures 85% for 1927, 80% for 1926 and 82% for the ten year period.

The Tomato Plant Bed

Many tomato plant beds for the production of stock for the canning crop are seeded about the middle of April. The seed bed should be thoroughly prepared previous to seeding, Extension Service bulletin "More Tomatoes From Fewer Acres" describing the method in detail. A wheel seeder, particularly the type with revolving barrel, will be found useful for regulating the depth and the thickness of seeding.

Preparations for combating the flee beetle should be made in advance of the appearance of the tomatoes above ground. A hand duster and a supply of copper arsenate dust furnish effective implements of warfare.

Because of the large stock of canned tomatoes unsold it would be the part of wisdom on the part of growers to keep the acreage down and to secure larger yields on the area planted. In many cases it would be better to put 1000 lbs. of fertilizer on one acre rather than to put 500 lbs. each on two acres. The point of diminishing returns from the use of plant food is certainly higher with tomatoes than with many other truck crops. Potatoes, spinach and asparagus are other crops giving relatively high returns from heavy feeding.

Cut Out the Cut Worm

Losses of cabbage, tomato and other plants from attacks of cutworms are often heavy in cool backward seasons. Poison bait can be prepared cheaply and used effectively for controlling this pest. Fifty pounds of bran or middlings, one pound of paris green or arsenate of lead with one gallon of molasses, makes a good bait. Mix the bran and poison thoroughly by shovelling over several times; dilute the molasses with sufficient water, so that when poured on the bran and thoroughly mixed, a crumbling mass is obtained. Place about the plants at nightfall or under light pieces of boards at any time or scatter broadcast.

The Temperamental Hotbed

April is a difficult month for the hotbed caretaker. Constant attention is required to utilize to the best advantage the constantly varying conditions of temperature. On bright days the temperature rises rapidly and beds must be ventilated more freely, the sash being entirely removed on accasion.

Toward evening the temperature may drop rapidly chilling the plants. Occasionally sharp frosts may occur and covering in addition to the sash may be needed. Attention to watering is also essential for the best development of plants. Warm moist conditions produce a soft spindly plant poorly adapted to transplanting to the open field. Plants must gradually be hardened off before being removed to permanent quarters.

Nitrogen for Early Crops

The nitrogen in the soil is not as available in early spring as it is later in the season after the soil warms up. It is only under these conditions that the bacteria in the soil are active making the nitrogen available for the use of plants. For this reason readily available nitrogen in the form of nitrate of soda or sulphate of ammonia should be used more liberally in early spring than later. Nitrogen is particularly useful for crops, the leaves and stems of which form the edible parts. This will include such crops as cabbage, asparagus, rhubarb, celery, lettuce, spinach, kale, endive, mustard and several other vegetables of this character.

It is probably better to use nitrate of soda in small amounts but applied at frequent intervals. Growers who are skillful in the use of nitrogen in quickly available forms secure quite profitable returns.

"The Maryland Standard Twelve"

In the compaign to eliminate the great multiplicity of fertilizer brands governmental authorities and fertilizer manufacturers cooperated in the development of a limited number of fertilizer formulas for use in Maryland. This has come to be known as the Maryland Standard Twelve High Analysis Fertilizers. Certain modifications of these formulas as applied to truck crops have been suggested. These formulas as modified follow:-

No. 1.	7 - 6 - 5	Early potatoes and truck crops, beans, canning beets.
3.	5 - 8 -10	Tomatoes and other truck crops. Early tomatoes and sweet potatoes on light sandy soils.
4.	4 - 8 - 4	Tomatoes and other truck crop.
	8 -16 - 8	Canning beans and peas, sweet corn on poor soils.
5.	3- 10 - 6	Late potatoes, sweet potatoes and tomatoes on heavy soils. Spinach to be followed by top dressing.
6.	3 - 8 - 8	Sweet potatoes on fertile soil.
12.	10 - 5 - 0	Top dressing for spinach.

VEGETABLE GROWERS' NEWSLETTER

Issued by

The Maryland Vegetable Growers' Association,
W. R. Ballard, Secretary-Treasurer.

Vol. 4. No. 5. College Park, Maryland. May 1927

Asparagus Tour

The annual Cecil County asparagus tour took place Thursday, May 12th in which the fields of Herbert Paul, George B. McKeown, Wallace Williams, Reginald Constable and William T. Goode were visited. These growers have fields approximately twenty acres in size. The quality of the product is exceptional and the asparagus is carefully graded, packed and sold under special brands.

George McKeown explained to the more than forty growers present his method ofgrowing and handling the crop. Before the cutting season begins he applies 300 lbs. nitrate of soda and 300 lbs. of acid phosphate per acre. After the cutting season a ton per acre of the following mixture is used: 200 lbs. nitrate of soda, 200 lbs. ammonium sulfate, 600 lbs. of muriate of potash and 1000 lbs. raw bone meal. Some manure is used in addition.

The very best strain of Washington asparagus is used, the plants having been raised fromseed and the strongest crowns selected. Rows are five feet apart and the plants are fifteen to eighteen inches apart. The crowns are placed from nine to eleven inches deep. In early spring the fields are plowed to form about five inches of loose surface soil. Late summer spraying is practiced to control the beetles.

In the section around Elkton the cutting season starts about April 20th and extends over a period of nine weeks.

Mr. McKeown was cutting about four crates per acre per day at the time of the tour. The stalks are cut eight inches long and graded into three grades. (1) Colossal, about 20 stalks to a two pound bunch, (2) Fancy, 30 - 35 stalks per bunch and (3) choice which includes the small straight stalks. The crate used is 19 inches long, 11½ inches wide at the bottom and 10 inches across the top, and 10 inches deep. This holds one dozen bunches, which are placed upright on a bed of wet sphagnum moss. The returns from the May sales ranged from $3.50, $4.00 and $5.00. Earlier in the season prices as $8.00 tp $12.00 per crate were received.

Wallace Williams has developed quite a parcel post business shipping in specially constructed pasteboard boxes direct to consumer. The boxes cost 9½ cents each and when filled with two bunches retailed at $1.50 each; the postage amounts to 35 cents per box.

Spinach

The conditions so far this spring have been quite favorable to the growth of spinach. Growers in the vicinity of the District of Columbia say that the variety Princess Juliana sells best on the Washington market.

In the Baltimore district Bloomsdale is the predominating variety. Some growers are having good success with the Virginia Savoy planted in fall either for fall or early spring use. This variety however, is not adapted to spring seeding.

The Annual Report

Manuscript for the annual report of the Association has been turned in to headquarters and the probabilities are that this publication will be printed and ready for distribution in the near future.

A Labor Saver for Truckers

The Secretary would be interested to know if any of the members have had successful experiences with the Barker Weeder-Mulcher-Cultivator. This hand tool is manufactured by the Barker Manufacturing Co., David City, Nebraska. It utilizes the well known principle of the scuffle hoe, cutting the roots of the weeds. In addition it has metal strips attached to the wheels somewhat in the fashion of the revolving knives of the lawn mower which break up the crust lifted by the scuffle hoe knife. It appears to be built along good lines and has given excellent service in the home garden. It probably would not work well in gravelly soil. It is made in six different sizes varying in cutting width from six to fourteen inches. For deeper cultivation cultivator teeth are provided and leaf guards permit the use of the machine after plants become large and overhanging.

Turning Back the Attack on Cucumbers and Cantaloupes

The insect and disease pests are marshalling their forces for the attack on the cucumbers and cantaloupes. This is calculated to test the generalship of the grower, and much depends on being prepared to begin the attack. Otherwise he may be on the defensive through the entire season. Most of the measures are of a preventive character so that thegrower should get the jump on the pests.

One of the first to deal with is the cucumber beetle. The present recommendations of the Entomological Department is to keep the foliage covered with a mixture consisting of 20 parts of gypsum and 1 part of arsenate of lead. This dust has also been found effective in the control of the asparagus beetle which seems to be particularly ravenous this spring.

The mosaic disease or "white pickle" as it is called, has done considerable damage to cucumbers and other plants the last few years. It has been found that the disease is harbored by some of the common weeds and seems to be carried to the cultivated crops by insects. One of the first precautions is to see that all wild cucumber, milkweed, pokeweed, ground cherry and catnip plants are kept away from the plants. In addition measures should be taken to control the insects which carry the disaase. Cucumber and canteloupe plants in the field attacked by the mosaic should be pulled up and removed to prevent further infection.

One of the most destructive diseases especially on canteloupes, since it quickly ruins the quality of the fruit, is the leaf spot. Dusting with bordeaux arsenate seems to be the approved reme dy at the present time although the liquid spray (3 - 4 - 50) is also effective. From observation and experience the writer is of the opinion that in nine times out of ten thorough dusting or spraying for this disease will be found a profitable investment.

Certified Potatoes

The following Maryland growers had potato seed eligible for certification according to Dr. R. A. Jehle, Extension Pathologists.

A. M. Allen, Woodwardville, Maryland.

H. P. Miller, Grantsville, Maryland.

George H. Buckingham, Merrittsville, Maryland.

No information is at hand as to whether these growers still have stock for sale.

VEGETABLE GROWERS' NEWSLETTER

Issued by the

Maryland Vegetable Growers' Association,
W. R. Ballard, Secretary - Treasurer.

Vol. 3. No. 6. College Park, Maryland. June 1927

Worcester County Potato Tour

The Fourth Annual Potato Tour of Worcester County took place on Thursday June 16th. The weather was ideal and the attendance was good. The crowd assembled at the farm of J. P. Taylor, east of Pocomoke at 8:30 a. m. for the inspection of potato and sweet potato fertilizer plots.

At 10:00 a. m. the party arrived at the farm of E. E. Nock, Stockton, to inspect the test plots of 24 strains of Irish Cobbler potatoes, and at 11:00 a.m. similar strain tests at the farm of F. J. Dukes & Bros. one-half mile west of Girdletree.

Lunch was served at noon on the lawn at the farm of E. T. Taylor, west of Snow Hill. After lunch an entertainment feature took the form of a mock trial. The subject of the sketch was "Three Potato Thieves on Trial". From the cast of characters, it appears that the thieves were "Stealthy Scab", Ruthless Rhizoctonia" and "Venomous Virus (Mosaic)".

Members of the Extension Service, Local Farm Bureau, Potato Growers and Townspeople made up the cast. After the examination of the following witnesses, Agricultural Advice, Good Grade, Intense Inspection, Doctor Diseases and Prosperous Producer for the prosecu tion and Shiftless Skeptic, Lena Lankey and Rastus Razor for the defendants, the jury agrees on a verdict of guilty. The Judge thereupon orders Stealthy Scab to be permanently banished from Worcester County by planting potatoes free from scab, treating seed potatoes and plowing under cover crops; Ruthless Rhizoctonia by using certified seed, treating seed potatoes and planting land where Rhizoctonia is severe to other crops for at least three years; and Venomous Virus by using northern grown certified seed of known origin or home grown certified seed.

After the trial 24 strains of Irish Cobbler on the farm of E. T. Taylor were inspected then the party moved on to the Sub-station of the Maryland Experiment Station on the Charles Johnson farm, two miles north of Snow Hill, along the Berlin road. Here the tourists were given an opportunity of examining 42 plots of Irish potatoes and an equal number of plots of Sweet Potatoes to study the effect

of analysis and quantity of fertilizers used. In addition 20 plots showed the effect of potash on the potato crop. The tour ended with the inspection of seed potato certification plots on the adjoining farm of Jerome Johnson where each strain of certified Irish Cobbler seed grown in the county is tested.

One of the features of the tour was the demonstration of the new Iron Age Potato Digger drawn by a Fordson tractor.

The results of tests in the certification plots show that suitable soil and good culture do not prevent the development of seed borne diseases. The importance of using certified seed stocks is thus clearly shown. The particular section from which seed is secured is of less importance than the amount of disease prevailing in the seed stock fields.

Comments on Crops

The backward season seems to have favored the cool climate crops such as spinach, peas, lettuce, potatoes, cabbage, carrots, beets but it has been distinctly unfavorable for beans, corn, tomatoes, sweet potatoes, cucumbers, cantaloupes, egg plant and peppers.

Potato bugs and flea beetles have been abundant on tomatoes, although fields look pretty well on the whole. Plant beds were generally successful on the Eastern Shore while the cloth covered cold frame demonstrated its value in Western Maryland.

Sweet potatoes, cucumbers and cantaloupes got off to a poor start on account of the cool weather. The cucumber mosaic (white pickle) has begun to develop in fields on the Eastern Shore according to Dr. R. A. Jehle, Extension Pathologist. Dr. Jehle urges that growers remove from the field at once all poke weed, milk weed and ground cherry and all cucumber plants affected by the disease to prevent its spread to healthy plants.

The picking of string beans has started in Somerset and Wicomico counties.

Radio and the Farmer

The Radio Service of the U. S. Department of Agriculture has recently reported on the number and uses of radio sets on farms in the United States. These reports are based on answers to questionaires addressed to county agents in various parts of the country. The number of schedules tabulated are as follows:-

1923 - 1200 1924 - 944 1925 - 1086 1927 - 899

The estimated number of sets on farms in the United States is given as follows:-

1923 - 145,350 1924 - 364,800 1925 - 553,003 1927 - 1,251,186

Iowa ranks first among the States with 99,990 radios on farms. Indiana, Missouri, Nebraska, Illinois, Ohio and Kansas follow in regular order. Other states vary from Delaware with 912 sets on farms to Minnesota in eighth place with 54,896 radios owned by farmers. The statistics show that one-fourth of American farmers as a whole, now have radio sets.

In reply to the question, "If you had to give up one or the other, which would you prefer to have left, music or talk?" 2,358 farmers replied "Talk" and 1,538 answered "Music". The type of information desired by farmers was given as "Education farm programs, weather reports and market reports. Political talks and current news programs are in demand.

The music preference was for old time tunes, semi-classical and classical music mentioned favorally but "jazz" is not generally liked.

Farm program has stimulated the demand for bulletins and cook books.

Asparagus Propagation

Asparagus is normally propagated by sowing the seed and the growers usually select the strongest and most vigorous plants for setting in the field. A certain amount of uniformity is obtained in this way. Many growers occasionally find an outstanding plant in the field which gives a heavy yield of very large stalks. This suggests the possibility of working up a stock of exceptional quality by dividing the crown as is done with rhubarb and many perennial flowering plants. Ofcourse the process would be slow at first but would not seem to present unsurmountable difficulties. This plan would be especially applicable to market gardeners handling a fancy retail product.

VEGETABLE GROWERS' NEWSLETTER

Issued by the

Maryland Vegetable Growers' Association,
W. R. Ballard, Secretary-Treasurer.

Vol. 3. No. 7. College Park, Maryland. July 1927

The Annual Report

The Report has just been received from the printer and will be mailed in the next few days to all paid-up members. If you want a copy of this report but have neglected to send in your dues of $1.00, send in your check at once and your report will be forwarded. Important papers included in this publication deal with the culture, fertilizing and marketing of asparagus, possibilities of market gardening on the Eastern Shore, success with the Marglobe tomato, control of tomato blights (an unusually valuable article), production of early plants, regional production and competit ion in the marketing of vegetables and the relation of new insect pests to the Vegetable industry.

Do you know Beans?

Inspection of bean fields where ordinary commercial strains were used has shown striking differences in the amounts of anthracnose on the young seedlings. Results so far obtained indicate that Michigan and New York stocks are affected by this disease to the extent of from 30% to 50%, while Idaho grown stocks do not average over 3%. Since this disease is carried in the seeds it can be seen how important it is to know something of the source of stocks planted.

Limas Shy Bearers

Considerable complaint has been heard the last three or four years of lima beans not setting heavily. Some of the trouble has been due no doubt to unfavorable seasons yet normally limas produce an enormous number of flowers which never mature into well-filled pods. An investigation into the question of self sterility might throw some light on this question. Progress might be made by careful individual selections. In this connection it is interesting to note that the various seed catalogs are listing selections of heavy producing strains. A test of these new sorts might result in the discovery of varieties which would give greatly increased yields without calling for any additional labor or fertilizing.

The writer has for some years been growing in his garden a southern type of bush lima under the name of Jackson's Wonder which seems to be quite prolific under all sorts of climatic conditions. The beans are larger than the little Sieva or butter bean but since they are mottled with purple color they would probably not appeal to the average market. However, they have a fine nutty flavor and are well adapted to home use. A pole selection of this type has larger beans than most of the white seeded sorts and this also is desirable in the home garden.

Among the newer sorts which might be worth a trial is the Taylor listed by Francis Stokes; Giant Evergreen and Mammoth Podded listed by George Tait and Sons, Norfolk., Virginia. Florida Butter listed by N. L. Willet Seed Co., Augusta, Georgia. Dreer's Improved Pole or Challenger is well spoken of in some quarters. A discussion of this crop would no doubt be worth while for the next Annual Meeting. (By the way, the Secretary will appreciate receiving any suggestions which will aid in making upan interesting and valuable program).

The Turnip Patch

Little in known of the origin and early history of the turnip (Brassica rapa) but it is said to be found growing wild in Russia and Siberia. It is a cool climate crop and grown mostly in the fall except in the south where it is produced in the winter mainly for the tops which are used for greens. A deep rich loam is the ideal soil since a rapid, vigorous growth must be secured if the turnips are to be tender and of high quality. Since turnips are commonly planted to follow some early crop, usually no additional fertilizer is required. However, nitrogen and phosphoric acid are the elements needed rather than potash.

Turnips are related to cabbage, cauliflower, rape, kale, etc., and is an annual when planted in spring or a biennial when seeded later. Seed may be planted in drills 12" - 15" apart for hand cultivation or about 24" apart for horse cultivation. The usual rate of seeding requires about two pounds or less per acre. Broadcasting is not as prevalent as formerly owing to lack of uniformly good results but in such practices more seed is required. Plants need to be thinned to stand from 2" - 6" apart in the row depending upon the purpose for which grown. If they are to be sold in bunches, they may be closer than if allowed to develop to a larger size. In the south, plants removed in thinning are used for greens.

Varieties vary in the length of time required for maturity so that seeding time varies from the middle of July to the last of August. Rutabagas (Brassica Napobrassica) are similar in appearance to the turnip, having a denser root rounded or elongated rather than flattened and the leaves are smooth rather than hairy like the turnip. The rutabagas require from 4 - 6 weeks longer to mature than turnips and grow to a greater size than most varieties.

Usually when turnips are broadcast too much seed is used. Someone has offered the following rule:- Take the amount of seed you think needed, mix with equal parts of sand, divide into two parts, throw one part away and sow the other.

Plant Protectors

In the production of early vegetables, it is often of vital moment to have the crop mature a few days ahead of the ordinary season if one would get the advantage of exceptionally high prices. To attain this end a few Maryland growers are testing out the practicability of utilizing plant covers. The results secured this year have been encouraging and there is a probability that the next few years may see a considerable extension of this practice. The type being used comes knocked down at about $3.00 per thousand, and are supposed to last one season. Not only has their use resulted in better germination and growth but they have been very effective in protecting plants from the flea beetle, cucumber beetle and other insects. For early tomatoes, cucumbers and cantaloupes as well as for other crops, the merits of these plant covers deserve careful consideration.

Tomato Mosaic

Observations on the spread of mosaic in tomato fields at the Experiment Station indicate that this disease is readily distributed through cultivation and other operations connected with the culture of this crop. While there is little doubt that certain insects have an important function in early infections it is quite evident that several factors are involved in its spread through the field. Fortunately the later infections appear to have little practical effect in lowering the yield.

Chinese Cabbage

If one wishes to try a crisp, tender salad plant for the home garden he would find it in the Chinese or Celery Cabbage. Seed should be planted thinly in rows 12" - 18" apart about August 1st. If planted too early, the plants have a tendency to run up to seed without producing a head. Two varieties are commonly listed in the seed catalogs, these being Wong Bok and Pe Tsai.

VEGETABLE GROWERS' NEWSLETTER

Issued by

Maryland Vegetable Growers' Association
W. R. Ballard, Secretary - Treasurer.

Vol. 3. Nos. 8 - 9. August - September 1927

The Secretary Travels

Some of you may have wondered why the August Newsletter did not appear. The Secretary hastens to explain that he was spending his vacation in Kansas and Oklahoma, consequently the August number did not materialize on time so now it is combined with the September issue.

Through some misunderstanding at the last annual meeting, the Association has not been represented on the Board of the Agricultural Corporation. To overcome this difficulty Pres. John E. Patten has just appointed James W. Davis of Harford County to serve in this capacity until the next annual meeting.

It will soon be time to work out a program for the next annual meeting. The Secretary has tried to get speakers who could give helpful information on subjects of interest to the growers. If any member is anxious to have particular topics discussed, such matters should be brought to the attention of the Secretary at once so that their inclusion in the program may be effected.

Second Crop Potato Seed

In the early potato sections of the Eastern Shore growers think well of the second crop tubers for planting the following spring. Usually they have strong, well developed eyes and these produce vigorous growing plants.

Because the tubers from the early crop of Irish Cobbler will not sprout immediately after being dug it is customary to hold over in cold storage some of the seed stock from the spring planting for planting about the last of August for the production of the second crop.

Recently F. E. Denny of the Boyce-Thompson Institute, Yonkers, New York, has discovered that freshly dug

Irish Cobbler potatoes can be made to sprout immediately by treating the cut tubers with ethyl chlorhydrin. Tests made this season at the Experiment Station by Thos. H. White appear to confirm the results secured by Mr. Denny. In these tests Cobbler potatoes dug July 5th were cut and treated with a 50% solution then kept in a closed container for 24 hours and immediately planted. A check up on the stand shows that 25% of the tubers had come up. Uncut tubers treated the same way failed to show that a single tuber had sprouted.

Another lot cut, treated and kept in a closed container for 48 hours showed a 70% germination. Whether the method can be placed on a practical basis for commercial growers remains to be seen. At any event it has been demonstrated that the rest period of freshly dug Irish Cobblers can be broken by this treatment.

Recent Publications

In bulletin #311, "Tipburn of Lettuce", Ross C. Thompson, Experiment Station, Fort Collins, Colo. has thrown some new light on the causes of this trouble which seems to upset all the old ideas held by investigators. Unfortunately he holds that the "possibilities of developing control measures which will reduce to any considerable extent the ravages of tipburn are not bright".

Of special interest should be bulletin 57 of the Virginia Truck Station, Norfolk, Virginia, by H. H. Zimmerley on Soil Acidity in Relation to Spinach Production in which he summarizes the work done along this line. Some of the members may remember the interesting paper presented by Professor Zimmerley on this subject at the annual meeting a year or so ago.

Growing and Handling Asparagus Crowns, bulletin #381, by H. A. Jones and W. W. Robbins, Experiment Station, Berkeley, California, is of interest as is also bulletin #206. Potato Growing in Iowa as Affected by Temperature by A. F. Erwin and R. A. Rudnick, Ames, Iowa.

John E. Weaver and William E. Bruner have just published a new book entitled - Root Development of Vegetable Crops. There is an obvious relation between the development of the root system and the character of the cultivation suited to the needs of individual vegetable types. The average grower has little conception of the wide range of the root systems of many common vegetables. It is rather surprising that roots of carrots have been traced to a depth of seven feet, while watermelon roots have been found to extend from thirteen to sixteen feet.

Tomato Growers Meet

On September 1st the annual field tour and meeting of those interested in the latest methods of growing tomatoes was held under the auspices of the Extension Service of the University of Maryland in cooperation with the Tri-State Packers' Association. Starting at Elkton, the tour included examination of a twenty acre field of Marglobe tomatoes planted for the production of seed on the farm of George McKeown, near Elkton, variety tests on the farm of George Thornton, Chesapeake City, and the United Packing Company's plant at Newark, Delaware., where seed tomatoes for the Tri-State Association are pulped and the seed saved.

In the meeting which followed, Professor Fred W. Geise, outlined the experimental projects relating to canning carried on by the Experiment Station under the Purnell Act. L. M. Goodwin, Canning Crop Specialist, of of the Maryland Extension Service reported on the progress of demonstration work in the State. Dr. J. B. S. Norton reported on recent work being done in the control of tomato mosaic, while Dr. F. J. Pritchard, Pathologist of the United States Department of Agriculture outlined briefly essential practices to be observed in successful tomato culture.

Some of the interesting points brought out in these addresses were:

The production of adapted strains of sugar corn with even maturity and proper starch content. The effect of various fertilizer elements on the quality of peas and the proper balance best to use. Control of anthracnose disease of beans. Testing of commercial varieties of tomatoes to determine those best adapted to the several soil conditions. Demonstrations to show that removing suckers from sweet corn does not materially increase quality nor quantity. Forms and uses of seed treatment in its relation to disease control. Better organization for carrying out the tomato seed saving work. Selection of adapted varieties and the application of sufficient plant food to furnish continuous nourishment to insure a long bearing period. Leaf spot control by means of fall ploughing tomato lands.

On the following day the party motored to Denton where a test is being made to demonstrate the effect on yield of the time of setting plants in the field. Outstanding differences were noted in vine growth and in set of fruit in favor of the earlier set plants.

At the Ridgely Substation the Experiment Station furnished lunch to the party numbering about seventy-five. At the Station the visitors evidenced considerable interest in the fertility trial plots of tomatoes and lima beans.

VEGETABLE GROWERS' NEWSLETTER

Issued by

Maryland Vegetable Growers' Association
W. R. Ballard, Secretary - Treasurer

Vol. 4. No. 10 College Park, Maryland October 1927.

Bean Culture

Professor E. V. Hardenburg of Cornell University has recently published a book on Bean Culture which is a welcome addition to the list of Vegetable crop treatises. The results of experimental work as well as practical experiences and observations have been combined to make this a valuable book. Beans as a world crop, the botany of beans, production factors, diseases and insects, harvesting and marketing are all discussed with the necessary detail. This is one of the Rural Science Series edited by Dr. L. H. Bailey and is published by the MacMillan Co., New York City.

The Late Blight of Potatoes

Mr. Thomas H. White, of the Experiment Station reports that the late blight of potatoes has been quite prevalent this year even in sections where it is not ordinarily found. Tubers showing discolored ends should be discarded when placing potatoes in storage since these specimens will serve as spots of infection and serious storage losses may result. Potatoes to be used for seed purposes should be inspected very closely in order to prevent the spread of the disease.

The Elusive Cauliflower

Cauliflower has headed better this season than normally, due to no doubt to the cool weather conditions during August. Weather reports indicate temperature for this month was 5% lower than in normal seasons. Cauliflower is usually a profitable crop when it heads up well but there is more than the usual uncertainty attending the culture of this crop.

How is your Spinach?

The resistance of the Virginia Savoy Spinach to the mosaic was never more strikingly shown than in the test plots at the Experiment Station this fall. Out of sixty strains and varieties only the Virginia Savoy stands up green and healthy, while all other types are sickly with yellowing abnormal foliage.

Potato Tuber Unit Work

As with other vegetable crops, control of the diseases affecting potatoes is becoming increasingly important. The University of Maryland is starting a new line of work which might be compared to the testing of seed corn. The primary object is to preserve the McCormick which is a tremendous yeilder and particularly adapted for use as potato chips. The method consists of selecting the most promising tubers, cutting off one end and in early spring planting these end pieces as a check on the presence of disease. Each tuber will be numbered so that reference can be made to the corresponding tuber. If the test piece shows that disease is absent, the remainder of the tuber is to be planted at the usual time for the fall crop. This scheme will be of particular interest to seed growers who desire to have their crops certified. Already certain growers in Worcester County have made preliminary selections for inaugurating this work next spring.

Tomato Mosaic Disease

J. B. S. Norton

By the end of the picking season, most of Maryland tomato fields are pretty well infected with the light and dark green leaf mottling which is known as mosaic disease. Early infected plants may be so badly diseased that that the leaves are narrow or even only slender green strings.

Just how much injury this disease does is a practical question of interest to growers. So few plants are far from it that we cannot compare diseased with healthy fields; but field records taken this year, comparing those plants infected first with those showing the disease week after week, from before blooming to ripe fruit, demonstrate that those showing mosaic disease before fruit is set yielded only 35% as much as those that had some ripe fruit before the disease appeared.

Seed bed infection or those infected in transplantings, then, may be counted on to show a very serious reduction in yield. The number of such plants is however, usually small, while the very wide spread infection that comes after the plants are large and full of fruit, when the disease is easily spread by cultivation and picking, reduced the crop but little.

Keeping the disease out of the plantsbeds by cleaning out horse nettle and ground cherry nearby, known to be mosaic carriers, and spraying for aphids, which can introduce the disease to plants they suck, leaving the poor small plants untouched in the bed for mosaic dwarfs the seedlings, are means of preventing this more serious early infection.

This past summer in one field all mosaic plants found for three weeks after the plants were set, were pulled and taken out. This removed the sources of the wide spread later infection due to rubbing diseased and healthy plants together in cultivating and later to contact with infected hands and feet of pickers. This field remained almost free from mosaic a month after other fields were fully infected.

While insects are known to spread the mosaic disease, it is believed the handling in planting, and cultivating, also picking is by far the greatest source of infection.

Edible Mushrooms

Conditions this fall have been quite favorable for the production of mushrooms in pastures and meadows. These are often collected for market or for home use. As a rule little danger attends the collection of the common sorts. However, in order to avoid the danger of collecting poisonous kinds the collector should be familiar with the common types likely to be encountered. Farmer's bulletin No. 796, Some Common Edible and Poisonous Mushrooms, contains information which enable the observant person to collect mushrooms safely from the fields.

The bulletins gives this warning - in case of mushroom poisoning a physician should be summoned immediately, but an emetic should be given before his arrival. Warm salt water or mustard water may be used for this purpose.

Cabbage Storage

Farmer's bulletin #433, gives some helpful information on the prerequisites for the successful storing of cabbage. These are given as (1) carefully grown and carefull handled heads of a sort well adapted for storing; (2) storage houses so constructed and arranged as to prevent drop from ceiling or roof striking the stored heads, and (3) such an arrangement and control of the ventilation and temperature of the building to prevent the condensation of moisture on the cabbage while in storage.

Storage troubles are more largely the result of careless handling and bad ventilation than of disease.

VEGETABLE GROWERS' NEWSLETTER

Issued by
The Maryland Vegetable Growers' Association,
W. R. Ballard, Secretary-Treasurer.

Vol. 4. Nos. 11 - 12. November - December 1927

Program for the Annual Meetings

THE MARYLAND VEGETABLE GROWERS' ASSOCIATION

Tenth Annual Meeting

Wednesday, January 4th, 1928.

9:30 A. M.

Call to order, - - - - - - - - - - - - Mr. J. E. Patten, Pres.
Cambridge, Maryland.

Report of the Secretary-Treasurer- Mr. W. R. Ballard,
College Park, Maryland.

"The Control of Truck Crops
Insects" - - - - - - - - - - - - - Dr. E. N. Cory,
College Park, Maryland.

"The Production and Marketing
of Cantaloupes" - - - - - - - Mr. C. H. Nissley,
New Brunswick, New Jersey.

"Control of Cucumber and
Cantaloupe Diseases in Md" - - Mr. W. W. Gilbert,
(Illustrated with slides) U. S. Department of Agriculture
Washington, D. C.

"How Turnip Broccoli is Grown
and marketed on the Eastern Shore - Mr. G. R. Cobb,
Salisbury, Maryland.

"The Present Status of Seed Treat-
ment for the Control of Vegetable
Diseases" - - - - - - - - - - - - - - Mr. H. A. Hunter,
College Park, Maryland.

Appointment of Committees:

(Members are invited to meet jointly with the State Horticultural Society Wednesday evening to listen to the discussion of marketing problems relating to vegetables as well as fruit.)

Thursday, January 5th, 1928

"Canning Crops work in Maryland - - - - - Mr. L. M. Goodwin, Denton, Maryland.

"Ten Ton Tomato Clubs for Adults -- - - Mr. E. I. Oswald, College Park, Maryland.

"Beans as a Canning Crop" - - - - - - - - Mr. A. D. Radebaugh, College Park, Maryland.

"Some Sweet Corn Seed Problems" - - - - Mr. W. B. Kemp, College Park, Maryland.

"The Influence of Temperature on the Yield and Quality of Peas". - - - Dr. V. R. Boswell, College Park, Maryland.

Report of the Committees:

= =

A New Food Crop

Dr. Jackson of the U. S. Bureau of Standards is co-operating with the U. S. Department of Agriculture in experiments leading to the utilization of new crops for the production of sugar. The Jerusalem Artichoke is the plant being given the most attention at the present time although the dahlia tuber produces a better sugar. These sugars are in the form of levulose or fruit sugar and are much sweeter to the taste than ordinary cane sugar. Dr. Norton of the Maryland Experiment Station has been studying the dahlia types and strains with reference to their yield of tubers. Some varieties have given as high as 18 tons per acre. The big problem, however, is to work out cultural methods so as to make their production on a large scale practicable. The suggestion has been made that strains could be developed through selection which could readily be grown from seed thus doing away with the laborious storing, dividing and replanting the tubers. At the present time there seems to be more promise in the Jerusalem artichoke.

How about MORE Lettuce?

Lettuce is one of the most important of the salad plants and is used the year around where available on the markets. There is a large commercial production of this cropin greenhouses in New York and other northern sections. In recent years there has developed a very large production out of doors in the South. There is a period between the harvesting of the crop in these two sections in which the markets are not as well

supplied as they might be. Maryland growers might find it profitable to increase their plantings with this in mind.

The popular Iceberg lettuce is especially suited for this purpose since it is a crisp heading type more resistant to hot weather than the butter types such as Big Boston.

Seed might be sown in a hot bed about Febmuary tenth, transplanted to the fieldin March and harvested the lattdr part of May or the first of June.

The accompanying chart shows that the car-lot shipments are not only lowest in June but very strikingly reduced from the figures for all other months.

"Mass Production" of Vegetables

The term "mass production" so frequently used in relation to modern industrial methods, is coming more and more to be applied to agricultural operations. Keen competition, high cost of labor and the demand for more uniform quality, are forcing vegetables growers to make greater use of machinery in the production and grading of their products.

The tremendous development in the field of canning is another factor which is to be taken into account. The high quality of the better grades of canned vegetables and the moderate price, together with their wide distribution has greatly stimulated the use of such products by consumers. For one thing it eliminates the preparation of the fresh vegetables by the busy housewife who finds that this often consumes considerable time.

Canning equipment has reached such a high stage of perfection and canning methods have become so standardized that with reasonable care canning operations are mainly a matter of routine.

The limiting factor in this field is undoubtedly the difficulty of securing an assured supply of raw products of high quality. This is where "mass production" will have its greatest field and nowhere else will good management and intelligent direction be of greater importance.

CARLOT SHIPMENTS OF LETTUCE